

ABSTRACT

A coating is plasma sprayed onto a cylinder bore and cylinder head sealing surface of a cylinder block of an internal combustion engine. The coating is harder and/or more wear resistant than the cylinder block, itself. A cylinder head mounts to the cylinder head sealing surface so that the coating is at least partially disposed between the cylinder block and the cylinder head. The coating therefore protects the cylinder block from exposure to the cavitating pressures that can develop in the combustion chamber of the cylinder. A depression is formed in the cylinder head sealing surface to account for the thickness of the coating. A chamfer is formed in the transition between the cylinder bore and the cylinder head sealing surface.